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A SURVEY
ON OCCUPATIONAL EMPLOYMENT
WITH
LABOR MARKET CHARACTERISTICS

1977

RESEARCH AND ANALYSIS SECTION
EMPLOYMENT SECURITY DIVISION
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MONTANA'S TRANSPORTATION, COMMUNICATION,
AND UTILITIES INDUSTRY

A SURVEY ON OCCUPATIONAL EMPLOYMENT
WITH LABOR MARKET CHARACTERISTICS
1977

STATE OF MONTANA
THOMAS L. JUDGE, GOVERNOR

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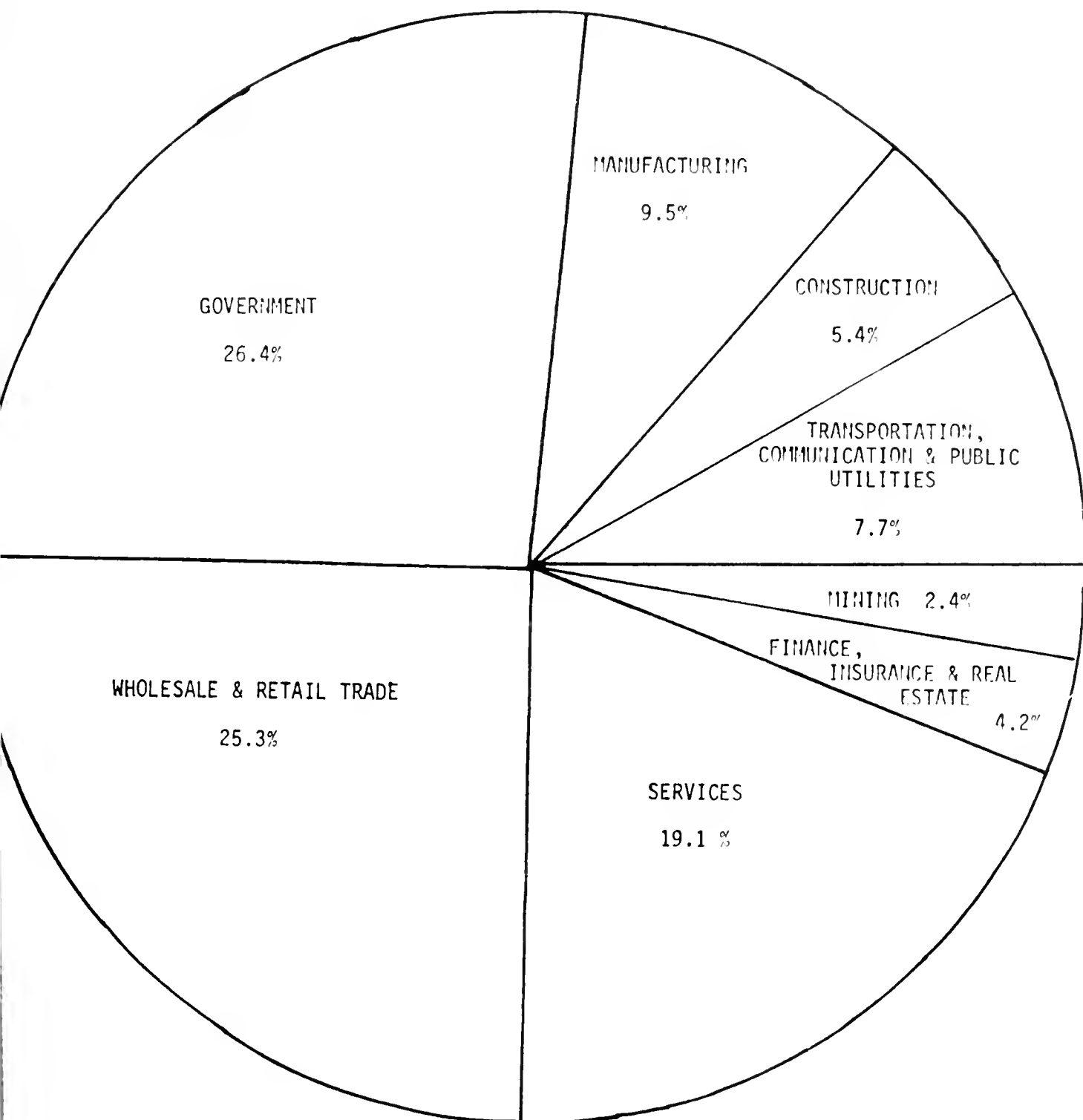
We would also like to thank the state members in our 23 job service offices. These dedicated individuals did a professional job in contacting the sampled employers and explaining the purpose of the survey.

In regard to the processing, analysis, and computer services, our sincere appreciation goes to the U. S. Bureau of Labor Statistics for their valuable technical help, as well as our own data processing staff.

Finally, we would like to thank our cooperating partners; the Governor's Employment and Training Council and the Superintendent of Public Instruction - Vocational Education, for their patience and financial help.

PERCENT DISTRIBUTION OF MONTANA'S NON-FARM WAGE AND SALARY EMPLOYMENT
BY MAJOR INDUSTRIAL GROUP

1976



Note: The distribution figures are based on revised 1976 annual average on the 1972 Standard Industrial Classification Manual and are not comparable to those figures based on the 1967 S. I. C. Manual.

THE TRANSPORTATION, COMMUNICATION, AND UTILITIES INDUSTRY

(SIC 41-42, 44-49)

SIC 41

LOCAL AND SUBURBAN TRANSIT AND INTERURBAN HIGHWAY PASSENGER TRANSPORTATION

INDUSTRY CHARACTERISTICS

Major group 41 includes passenger transportation within city and state areas. Air transportation is found in major group 45 and is not included in this section. The following categories are found in SIC 41: 1) local and suburban transit, including buses, subways, trolleys, etc, 2) local passenger transportation NEC (includes ambulance services, car rentals, etc.), 3) taxis, 4) intercity and rural highway passenger transportation (includes intercity and interstate bus lines), 5) local passenger transportation charter services, 6) school buses, 7) bus terminal operations, and 8) maintenance facilities for motor vehicle passenger transportation.

EMPLOYMENT TRENDS

The increasing need for energy-efficient forms of transportation is obvious. As energy problems continue and Montana's population grows, the demand for local and interurban mass transportation can be expected to rise, boosting employment in the industry. Increasing trends have already been recorded during the 1970's. The growth trend noted between 1970 and 1974 (+16.3%) is expected to continue at an accelerated rate well into the 1980's. By 1985, a 32.9% increase over 1974 is anticipated.

OCCUPATIONAL CHARACTERISTICS

The majority of employment (78.7%) in SIC 41 is concentrated in the maintenance and repair occupations. Bus drivers are included in this category. They account for 65.4 percent of maintenance and repair occupations and over half (51.5%) of the total occupations listed for SIC 41. Other major occupations include: Taxi drivers (14.3% of total occupations), ambulance drivers (7.3%), managers and officials (7.0%), and auto mechanics (3.0%).

SIC 42

MOTOR FREIGHT TRANSPORTATION AND WAREHOUSING

INDUSTRY CHARACTERISTICS

Major group 42 consists of three industries: trucking, public warehousing, and terminal maintenance facilities for motor freight transportation.

Trucking is divided into local and non-local trucking. Public warehousing includes such operations as farm product storage, household goods storage, and special warehousing and storage NEC (special warehousing includes commercial storage for such things as furs, textiles, goods in foreign trade zones, etc).

EMPLOYMENT TRENDS

A major decline in employment is noted in the warehousing and storage industry. Between 1970 and 1974, a 65% decrease in employment was recorded.

Declining employment in this sector is expected to continue into the 1980's.

The trucking industry shows a sharp contrast. An increase of 50.1% was noted for the 1970-1974 period. Possibly, products are being trucked to their destination more promptly, eliminating the need for extended storage periods.

Another factor contributing to decreasing employment in the warehousing and storage industry could be the introduction of automated equipment, causing displacement of manual laborers.

OCCUPATIONAL CHARACTERISTICS

Truck drivers represent nearly one-half of all employment in SIC 42. Other main occupations include deliverymen and routemen (9.8% of total), and other laborers (9.4% of total), and all other managers and officials (9.1% of total). Other categories with a high number of employees include clerical occupations such as bookkeepers, storeroom stock clerks, secretaries, and vehicle service dispatchers.

SIC 44 & 45

TRANSPORTATION BY WATER AND AIR

INDUSTRY CHARACTERISTICS

Since the water transportation and air transportation industries in Montana are comparatively small, they have been combined into one category.

Water transportation consists of seven subgroups. The first group deals with deep sea and St. Lawrence seaway transportation, obviously not found in Montana. The remaining groups are found in Montana. They are transportation on rivers and canals (including log rafting & towing), local water transportation (includes sightseeing boats), and services incidental to water transportation (includes marinas, yacht basins, boat yards, etc.)

The air transportation industry is made up of establishments engaged in furnishing domestic and foreign transportation by air and also those operating airports and flying fields and furnishing terminal services. Such businesses as aerial photography and crop dusting are classified according to the service they perform, and therefore are not included in the air transportation industry.

EMPLOYMENT TRENDS

Both water and air transportation show increases in employment between 1970-1974 (+34.8 for water, +30.5 for air).

Employment in the water transportation industry is expected to rise approximately 50% by the mid-1980's. However, since the number of employees in this industry is small, the percent increase may be misleading. Air transportation employment is expected to remain constant into the 1980's.

OCCUPATIONAL CHARACTERISTICS.

The largest portion of workers employed in the water and air transportation industry is found in the sales occupations. Traffic agents make up 45.1% of total employment in the two industries. Other major occupations include all other mechanics (10.5% of total employment), all other technical (8.6% of total), all

OCCUPATIONAL CHARACTERISTICS (cont.)

other managers and officers (7.9% of total), general maintenance men (7.6% of total), and all other laborers (6.9% of total). The "all other mechanics" group includes aircraft mechanics. The "all other technicians" group includes airplane pilots and radio operators. The "all other laborers" group includes line service attendants who perform duties such as fueling, servicing, loading and unloading aircraft.

SIC 46

PIPELINES, EXCEPT NATURAL GAS

INDUSTRY CHARACTERISTICS

Major group 46 includes establishments engaged in pipeline transportation of petroleum and other commodities. Natural gas lines are not included. They are classified as major group 49, Electric, Gas and Sanitary services.

The three major areas of pipeline transportation are crude petroleum pipelines, refined petroleum pipelines, and pipelines not elsewhere classified. This industry is relatively small in Montana with the majority of activity taking place in Yellowstone County.

EMPLOYMENT TRENDS

Projected 1977 employment for the pipeline transportation industry is 107, a decrease of 9 workers since 1974. Declining employment is expected to continue, resulting in a 26.2 % drop in employment by 1985. Note that natural gas pipelines are not included. Other pipelines directly connected with major public utility companies would be classified in SIC 49, therefore having no effect on employment in SIC 46.

OCCUPATIONAL CHARACTERISTICS

Over 80 % of total employment in the pipeline industry is in the maintenance occupations. Included in this category are maintenance foremen, gas compressor operators, general maintenance men, welders and flamecutters, and all other operatives (includes pump - station operators, main line station engineers, etc.).

SIC 47

TRANSPORTATION SERVICES

INDUSTRY CHARACTERISTICS

The transportation services industry as defined "includes establishments furnishing services incidental to transportation".^{1/} Included in this industry are such businesses as freight forwarding; airline, bus and railroad ticket offices; tourist and travel agencies; shipping brokers and agents; railroad car cleaning, icing and heating; cargo checkers and surveyors; toll bridges and roads; stockyards, etc.

In order to provide guidelines for more specific classification of these businesses, four categories have been set up. They include freight forwarding, arrangement of transportation, rental of railroad cars, and miscellaneous services. Each category provides a more defined concept of the businesses included in the section. The arrangement of transportation category is by far the largest employer in this industry. During the first quarter of 1977, it represented over 77% of total employment for SIC 47.^{2/}

EMPLOYMENT TRENDS

The largest increase in employment for the period 1970-1974 in the transportation, communication and public utility industry is seen here. A 53.2% increase was noted from 1970 to 1974 in the transportation service industry, resulting in 75 new job openings.

OCCUPATIONAL CHARACTERISTICS

Travel agent occupations represent 44.3% of total employment in SIC 47. Clerical occupations make up an additional 32.0% of total occupations. The main clerical occupations include hand bookkeepers, general clerks, receptionists and secretaries. Managers and officers account for 11.8% of total occupations.

^{1/} Standard Industrial Classification Manual, 1972; Executive Office of the President, Office of Management and Budget, U.S. Government Printing Office, p. 233

^{2/} ES 202 data, Research and Analysis Employment Security Division, State of Montana.

OCCUPATIONAL CHARACTERISTICS (Cont.)

Other major occupations include managers and officers, electrical engineers, draftsmen, and electrical technicians. Each represent 2.8 % of total employment.

SIC 48

COMMUNICATION

INDUSTRY CHARACTERISTICS

The communication industry includes four main groups: telephone communication, radio and TV broadcasting, and communication services n.e.c.

Communication is one of the most widely used industries in the nation. In 1974, 94 percent of American households had telephones. This compares with 90 percent of Montana households.^{1/} There were 7,584 television and radio broadcasting stations in the United States in 1975, with 69 of them in Montana.^{2/} The communication industry makes instant long-distance contact an everyday occurrence. In today's business atmosphere, modern communication systems are indispensable.

OCCUPATIONAL CHARACTERISTICS

Communication industry employment consists of the following major occupations (as reported during the OES survey):

	<u>Percent of Total</u>
Managers and Officers	8.0%
All Other Managers & Officers	<u>8.0%</u>
Professional Occupations	6.6%
Electrical Engineers	<u>3.2%</u>
Announcers	1.7%
Technical Occupations	2.2%
Electrical technician	<u>1.0%</u>
Service Occupations	2.1%
Janitors, Porters & Cleaners	<u>2.1%</u>
Maintenance Occupations	36.4%
Maintenance Foremen	<u>4.5%</u>
General Maintenance	2.2%
All Other Skilled Craftsmen*	28.8%
Clerical Occupations	43.2%
Stenographers	<u>1.6%</u>
General Clerk	7.5%
Switchboard Operator	21.9%
Typist	2.2%
Clerical Supervisor	<u>2.5%</u>

^{1/} Statistical Abstract of the United States, 1976; U.S. Department of Commerce, Bureau of the Census, U. S. Government Printing Office, Washington, D.C. P. 534

^{2/} IBID, p. 536

SIC 49

ELECTRIC, GAS AND SANITARY SERVICES

INDUSTRY CHARACTERISTICS

This group "includes establishments engaged in the generation, transmission and/or distribution of electricity, gas or steam."^{1/} The five main categories included in this group are: electric services, gas production and distribution, combination electric and gas and other utility services, water supply, sanitary services, steam supply, and irrigation systems. A few specific activities included in SIC 49 are: Natural gas transmission and distribution, electric power generation, water supply systems, malaria control (sanitary service) and steam supply systems.

EMPLOYMENT TRENDS

Total energy consumption has increased 109% during the 25 years following 1950.^{1/} Even greater needs can be expected for the next 25 years. The electric, gas and steam industry reflects this increased demand in its past employment trends. A 42.6% increase in employment took place between 1970 and 1974. Projected 1985 employment figures for this industry are 35.1% above 1974 employment figures.

Water and irrigation connected establishments experienced a 33.3% decline in employment over the 1970-1974 period. Increases are expected, and by 1985, employment should reach 1970 figures again.

Sanitary service establishments also experienced a 31.6% decline during the 1970-1974 period. Future employment trends should take the same shape as the water and irrigation industry.

^{1/} Statistical Abstract of the United States, 1976: U.S. Department of Commerce, Bureau of the Census, U.S. Government Printing Office, Washington, D.C., p.559.

OCCUPATIONAL CHARACTERISTICS

Maintenance occupations represent 44.4% of total occupations in SIC 49. The most common occupations are: all other managers and officers (8.6% of total), lineman (5.7% of total), meter readers (4.1% of total), all other laborers (3.3% of total), gas compressor operators (3.1% of total), general clerks (3.1% of total), accounting clerks (3.1% of total), and electrical engineers (2.8% of total).

TABLE I
EMPLOYMENT IN THE LOCAL AND SUBURBAN TRANSIT INDUSTRY

NATIONAL FIGURES

SIC 41

<u>YEAR</u>	<u>ANNUAL AVERAGE EMPLOYMENT</u>	<u>YEAR TO YEAR PERCENT CHANGE</u>
1960	284,400	---
1961	276,900	-2.6
1962	270,700	-2.2
1963	269,200	-0.6
1964	266,900	-0.9
1965	268,800	0.7
1966	270,500	0.6
1967	279,400	3.3
1968	281,500	0.8
1969	280,600	-0.3
1970	279,300	-0.5
1971	274,100	-1.5
1972	271,300	-1.4
1973	272,700	0.5
1974	272,700	0.0
JUNE, 1975	268,400	-1.6

SOURCE: Bureau of the Census, U.S. Department
of Housing and Urban Development.

TABLE II

EMPLOYMENT IN THE MOTOR FREIGHT TRANSPORTATION INDUSTRY

NATIONAL FIGURES

SIC 42

<u>YEAR</u>	<u>ANNUAL AVERAGE EMPLOYMENT</u>	<u>YEAR TO YEAR PERCENT CHANGE</u>
1960	855,900	---
1961	845,100	-1.3
1962	884,600	4.7
1963	903,500	2.1
1964	919,100	1.7
1965	963,500	4.8
1966	1,004,700	4.3
1967	1,019,000	1.4
1968	1,044,500	2.5
1969	1,083,400	3.7
1970	1,083,400	0.0
1971	1,079,500	-0.4
1972	1,116,500	3.4
1973	1,189,700	6.6
1974	1,186,200	-0.3
JUNE, 1975	1,091,100	-8.0

SOURCE: Bureau of the Census, U.S. Department
of Housing and Urban Development

TABLE III

EMPLOYMENT IN THE WATER AND AIR TRANSPORTATION INDUSTRY

NATIONAL FIGURES

SIC 44-45

<u>YEAR</u>	<u>ANNUAL AVERAGE EMPLOYMENT</u>	<u>YEAR TO YEAR PERCENT CHANGE</u>
1960*	191,200	---
1961*	195,700	2.4
1962*	196,900	0.6
1963*	201,700	2.4
1964	443,400	119.8
1965	459,200	3.6
1966	488,000	6.3
1967	541,000	10.9
1968	570,000	5.4
1969	583,500	2.4
1970	566,200	-3.0
1971	541,000	-4.5
1972	554,200	2.4
1973	567,200	2.3
1974	571,300	0.7
JUNE, 1975	560,300	-1.9

SOURCE: Bureau of the Census, U.S. Department
of Housing and Urban Development

* Water transportation employment information for the years 1960-1963 was unavailable. 1960-1963 figures represent only air transportation employment.

TABLE IV

EMPLOYMENT IN THE PIPE LINES (EXCEPT NATURAL GAS) INDUSTRY

NATIONAL FIGURES

SIC 46

<u>YEAR</u>	<u>ANNUAL AVERAGE EMPLOYMENT</u>	<u>YEAR TO YEAR PERCENT CHANGE</u>
1960	23,100	---
1961	22,200	-3.9
1962	21,600	-2.7
1963	20,700	-4.2
1964	20,000	-3.4
1965	19,500	-2.5
1966	18,900	-3.1
1967	18,700	-1.1
1968	18,500	-1.1
1969	17,900	-3.2
1970	17,800	-0.6
1971	17,700	-0.6
1972	16,800	-5.1
1973	16,200	-3.6
1974	16,400	1.2
JUNE, 1975	16,900	-3.0

SOURCE: Bureau of the Census, U.S. Department
of Housing and Urban Development

TABLE V

EMPLOYMENT IN THE TRANSPORTATION SERVICES INDUSTRY

NATIONAL FIGURES

SIC 47

<u>YEAR</u>	<u>ANNUAL AVERAGE EMPLOYMENT</u>	<u>YEAR TO YEAR PERCENT CHANGE</u>
1960	NA	---
1961	NA	NA
1962	NA	NA
1963	NA	NA
1964	82,700	NA
1965	85,200	3.0
1966	92,800	8.9
1967	100,200	8.0
1968	99,300	-0.9
1969	108,600	9.4
1970	114,700	5.6
1971	118,800	3.6
1972	118,400	-0.3
1973	123,700	4.5
1974	133,900	8.2
JUNE, 1975	140,500	4.9

SOURCE: Bureau of the Census, U.S. Department
of Housing and Urban Development

TABLE VI

EMPLOYMENT IN THE COMMUNICATION INDUSTRY

NATIONAL FIGURES

SIC 48

<u>YEAR</u>	<u>ANNUAL AVERAGE EMPLOYMENT</u>	<u>YEAR TO YEAR PERCENT CHANGE</u>
1960	839,700	---
1961	828,900	-1.3
1962	824,100	-0.6
1963	823,800	-0.1
1964	847,900	2.9
1965	880,800	3.9
1966	928,300	5.4
1967	969,600	4.4
1968	1,982,300	1.3
1969	1,049,300	6.8
1970	1,125,200	7.2
1971	1,130,000	0.4
1972	1,152,000	1.9
1973	1,174,000	1.9
1974	1,190,100	1.4
JUNE, 1975	1,167,700	-1.9

SOURCE: Bureau of the Census, U.S. Department
of Housing and Urban Development

TABLE VII

EMPLOYMENT IN THE ELECTRIC, GAS, AND SANITARY SERVICES INDUSTRY

NATIONAL FIGURES

SIC 49

<u>YEAR</u>	<u>ANNUAL AVERAGE EMPLOYMENT</u>	<u>YEAR TO YEAR PERCENT CHANGE</u>
1960	615,000	---
1961	613,700	-0.2
1962	610,400	-0.5
1963	610,000	-0.1
1964	614,700	0.8
1965	623,400	1.4
1966	629,500	1.0
1967	642,200	2.0
1968	653,800	1.8
1969	669,900	2.5
1970	690,700	3.1
1971	696,600	0.9
1972	712,900	2.3
1973	728,600	2.2
1974	742,100	1.9
JUNE, 1975	741,000	-0.1

SOURCE: Bureau of the Census, U.S. Department
of Housing and Urban Development

TABLE VIII

EMPLOYMENT IN THE TRANSPORTATION, COMMUNICATION AND UTILITIES INDUSTRY

NATIONAL FIGURES

SIC 41, 42, 44-49
(In Thousands)

<u>YEAR</u>	<u>ANNUAL AVERAGE EMPLOYMENT</u>	<u>YEAR TO YEAR PERCENT CHANGE</u>
1960	4,004	---
1961	3,903	-2.5
1962	3,906	0.1
1963	3,903	-0.1
1964	3,951	1.2
1965	4,036	2.2
1966	4,151	2.8
1967	4,261	2.6
1968	4,311	1.2
1969	4,435	2.9
1970	4,504	1.6
1971	4,457	-1.0
1972	4,517	1.4
1973	4,644	2.8
1974	4,696	1.1
1975	4,546	-0.3
1976	4,553	0.2
Oct. 1977	4,638	1.0

SOURCE: Bureau of the Census, U.S. Department of
Housing and Urban Development.

MONTANA
OCCUPATIONAL EMPLOYMENT
THE TRANSPORTATION, COMMUNICATION, AND UTILITIES INDUSTRY
SIC (41-42, 44-49)

LOCAL AND SUBURBAN TRANSIT
MOTOR FREIGHT TRANSPORTATION
AIR AND WATER TRANSPORTATION
PIPELINES
TRANSPORTATION SERVICES
COMMUNICATION
ELECTRIC, GAS AND SANITARY SERVICES

TABLE IX

TOTAL TRANSPORTATION, COMMUNICATION AND UTILITIES EMPLOYMENT
AS A PERCENT OF TOTAL EMPLOYMENT

1970, 1974 AND PROJECTIONS FOR 1985 ^{1/}

(SIC 41, 42, 44-49)

INDUSTRY	<u>1970</u>		<u>1974</u>		<u>PROJECTED</u> <u>1985</u>	
	<u>EMPLOYMENT</u>	<u>PCT.</u>	<u>EMPLOYMENT</u>	<u>PCT.</u>	<u>EMPLOYMENT</u>	<u>PCT.</u>
TRANSPORTATION, COMMUNICATION, & UTILITIES	18,550	7.28	20,970	7.00	21,730	6.3
Local & Suburban Transit	820	.32	960	.32	1,270	.3
Motor Freight Transportation	3,580	1.40	4,960	1.66	5,210	1.5
Air & Water Transportation	510	.20	670	.23	680	.2
Pipelines, Except Natural Gas	130	.05	120	.04	80	.0
Transportation Services	140	.06	220	.07	190	.0
Communications	3,280	1.29	3,870	1.29	3,940	1.1
Electric Gas & Sanitary Services	3,590	1.41	3,870	1.29	5,360	1.5

^{1/} All data are rounded to the nearest ten.

Note: Above employment totals include self-employed and unpaid family workers and it is not comparable to other wage and salary employment totals in this publication.

TABLE X

ESTIMATED EMPLOYMENT FOR THE TWELVE LARGEST
OCCUPATIONS IN THE TRANSPORTATION, COMMUNICATION, AND UTILITIES INDUSTRY

(SIC 41-42, 44-49)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u> ^{1/}
54000 Truck Drivers	1,933	20.3
61376 Switchboard Operator	1,351	14.2
59001 All Other Skilled Craftmen ^{2/}	1,264	13.3
59003 All Other Laborers	1,142	12.0
10000 Managers & Officers	1,138	12.0
55A36 Bus Drivers	560	5.9
61333 General Clerks	556	5.8
55A87 Deliverymen & Routemen	432	4.6
55B29 Maintenance, Foreman	346	3.6
71010 Traffic Agents	290	3.1
51900 All Other Mechanics	268	2.8
21005 Electrical Engineers	226	2.4
TOTAL	9,506	69.0
TOTAL, ALL OCCUPATIONS IN THE INDUSTRY	<u>13,772</u>	100.0

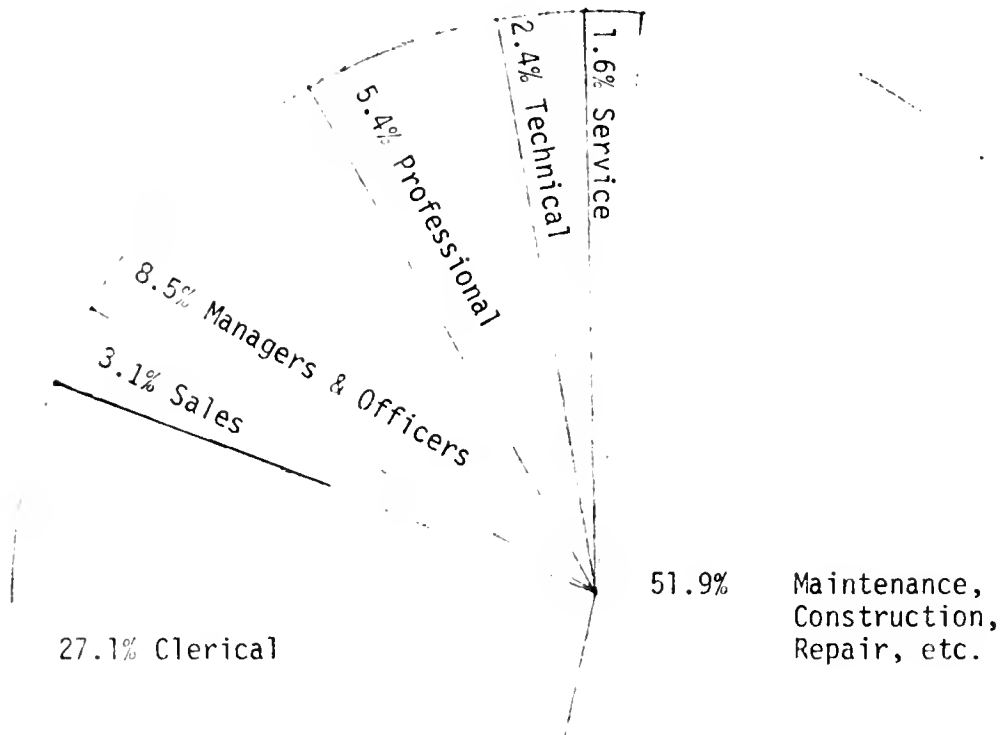
✓ Percentage distribution may not add to 100 due to rounding.

✓ Includes Cable Splicers, Central Office Repairers, Telephone Station Maintainer, Installer Repairers, etc.

Does not include occupations with relative error above allowable range.

GRAPH I

PERCENT DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
IN THE TRANSPORTATION, COMMUNICATIONS, AND UTILITIES INDUSTRY



CROSS INDUSTRY EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
(SIC 41-42, 44-49)

MAJOR OCCUPATIONAL GROUP	SURVEY INDUSTRIES									TOTAL
	41	42	44-45	46	47	48	49			
10000 Managers & officers	80 ^{1/}	400	50	*	30	330	280			1,170
20000 Professional Occupations	10	40	*	*	100	270	320			740
30000 Technical Occupations	10	*	50	10	0	90	170			330
40000 Service Occupations	10	70	*	0	10	90	50			230
50000 Maintenance, Construction Repair, Material Handling & Power Plant Occupations	850	3,080	190	90	10	1,500	1,450			7,170
60000 Clerical Occupations	130	750	30	10	70	1,770	970			3,730
70000 Sales Occupations	*	60	260	0	10	60	20			410
TOTAL ALL OCCUPATIONS	1,090	4,400	580	110	230	4,110	3,260			13,780

^{1/} Occupational data are rounded and may not add to total.

* Employment is less than 5 people.

TABLE XII

ESTIMATED EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
IN THE TRANSPORTATION, COMMUNICATION, AND UTILITIES INDUSTRY

(SIC 41-42, 44-49)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Total All Occupations	13,780 ^{1/}	100.0
Managers & Officers	1,170	8.5
Professional Occupations	740	5.4
Technical Occupations	330	2.4
Service Occupations	230	1.7
Maintenance, Construction, Repair, Material Handling, & Power Plant Occupations	7,170	51.9
Clerical Occupations	3,730	27.1
Sales Occupations	410	3.0

^{1/} Occupational data are rounded and may not add to the total.

TABLE XIII

ESTIMATED EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
IN THE LOCAL AND SUBURBAN TRANSIT INDUSTRY

(SIC 41)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Total All Occupations	1,090 ^{1/}	100.0
Managers & Officers	80	7.0
Professional Occupations	10	1.0
Technical Occupations	10	1.0
Service Occupations	*	0.5
Maintenance, Construction Repair, Material Handling, & Power Plant Occupations	860	78.5
Clerical Occupations	130	12.0
Sales Occupations	*	0.0

^{1/} Occupational data are rounded and may not add to the total.

* Less than 10 people in the occupation.

TABLE XIV

ESTIMATED EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
IN THE MOTOR FREIGHT TRANSPORTATION INDUSTRY

(SIC 42)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Total All Occupations	4,440 ^{1/}	100.0
Managers & Officers	400	9.1
Professional Occupations	40	0.8
Technical Occupations	*	0.0
Service Occupations	70	1.5
Maintenance, Construction Repair, Material Handling, & Power Plant Occupations	3,090	70.2
Clerical Occupations	740	17.0
Sales Occupations	60	1.4

^{1/} Occupational data are rounded and may not add to the total.

* Less than 10 people in the occupation.

TABLE XV

ESTIMATED EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
IN THE AIR AND WATER TRANSPORTATION INDUSTRY
(SIC 44, 45)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Total All Occupations	580 ^{1/}	100.0
Managers & Officers	50	7.9
Professional Occupations	*	0.5
Technical Occupations	50	8.6
Service Occupations	*	0.2
Maintenance, Construction Repair, Material Handling, & Power Plant Occupations	190	32.0
Clerical Occupations	30	5.7
Sales Occupations	260	45.1

^{1/} Occupational data are rounded and may not add to the total.

* Less than 10 people in the occupation.

TABLE XVI

ESTIMATED EMPLOYMENT BY OCCUPATIONAL GROUP
IN THE PIPE LINES INDUSTRY
(EXCLUDES NATURAL GAS)
(SIC 46)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Total All Occupations	110 ^{1/}	100.0
Managers & Officers	*	2.8
Professional Occupations	*	2.8
Technical Occupations	10	5.6
Service Occupations	*	*
Maintenance, Construction Repair, Material Handling, & Power Plant Occupations	90	80.4
Clerical Occupations	10	8.4
Sales Occupations	*	*

^{1/} Occupational data are rounded and may not add to the total.

* Less than 10 people in the occupation.

TABLE XVII

ESTIMATED EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
IN THE TRANSPORTATION SERVICES INDUSTRY

(SIC 47)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Total All Occupations	230 ^{1/}	100.0
Managers & Officers	30	11.8
Professional Occupations	100	44.3
Technical Occupations	*	*
Service Occupations	10	3.9
Maintenance, Construction Repair, Material Handling, & Power Plant Occupations	10	2.7
Clerical Occupations	70	32.0
Sales Occupations	10	5.3

^{1/} Occupational data are rounded and may not add to the total.

* Less than 10 people in the occupation.

TABLE XVIII

ESTIMATED EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
IN THE COMMUNICATION INDUSTRY

(SIC 48)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Total All Occupations	4,110 ^{1/}	100.0
Managers & Officers	330	8.0
Professional Occupations	270	6.6
Technical Occupations	90	2.2
Service Occupations	90	2.1
Maintenance, Construction Repair, Material Handling, & Power Plant Occupations	1,500	36.5
Clerical Occupations	1,770	43.1
Sales Occupations	60	1.5

^{1/} Occupational data are rounded and may not add to the total.

TABLE XIX

ESTIMATED EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP
IN THE ELECTRIC, GAS, AND SANITARY SERVICES INDUSTRY
(SIC 49)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Total All Occupations	3,260 ^{1/}	100.0
Managers & Officers	280	8.6
Professional Occupations	320	9.8
Technical Occupations	170	5.2
Service Occupations	50	1.4
Maintenance, Construction Repair, Material Handling, & Power Plant Occupations	1,450	44.4
Clerical Occupations	970	29.9
Sales Occupations	20	0.7

^{1/} Occupational data are rounded and may not add to the total.

MONTANA
ESTIMATED EMPLOYMENT
IN SELECTED OCCUPATIONS
BY SPECIFIC SURVEY INDUSTRIES
SIC (41, 42, 44-49)

TABLE XX

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE LOCAL AND SUBURBAN TRANSIT INDUSTRY

(SIC 41)

OCCUPATIONAL TITLE	OES CODE	ESTIMATED EMPLOYMENT	RELATIVE ERROR %	PERCENT DISTRIBUTION	PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION
TOTAL ALL OCCUPATIONS		<u>1,088</u>			
MANAGERS & OFFICERS		<u>76</u>			
All Other Managers & Officers	10000	76	15.80	6.99	83.3
PROFESSIONAL OCCUPATIONS		<u>9</u>			
Accountants & Auditors	25401	9	31.01	0.82	16.7
TECHNICAL OCCUPATIONS		<u>9</u>			
All Other Technical	39000	9	NA	0.82	3.3
SERVICE OCCUPATIONS		<u>5</u>			
Janitors, Porters & Cleaners	41000	5	36.27	.46	10.0
MAINTENANCE, CONSTRUCTION, REPAIRS, MATERIAL HANDLING, & POWER PLANT OCCUPATIONS		<u>856</u>			
Mechanic, Automotive	51008	33	23.66	3.03	30.0
Diesel Mechanic	51019	6	41.59	0.55	10.0
Ambulance Driver	55A06	79	34.25	7.27	20.0
Bus Driver	55A36	560	13.53	51.56	46.7
Cleaner, Vehicle	55A61	3	NA	0.27	3.3
Foreman, Maintenance	55B29	5	30.52	0.46	10.0
Instructor, Bus & Taxi	55B61	2	49.24	0.18	3.3
Taxi Drivers	55D09	156	27.79	14.36	30.0
Lubrication Man &/or Fuel Pump Attendant	55D67	12	NA	1.10	6.7

LOCAL AND SUBURBAN TRANSIT INDUSTRY (CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
CLERICAL OCCUPATIONS		<u>131</u>			
Bookkeeper, Hand	61307	8	44.19	0.73	10.0
General Clerk	61333	14	NA	1.28	6.7
Payroll & Timekeeper	61351	3	NA	0.27	30.0
Secretary	61368	15	19.57	1.38	10.0
Ticket Agent	61383	36	49.00	3.31	6.7
Storeroom Stockclerk	62008	2	49.24	4.88	3.3
Vehicle Dispatcher	62018	53	22.27	0.18	36.7
TRAFFIC OCCUPATIONS		<u>2</u>			
Traffic Agent	71010	2	NA	0.18	3.3

TABLE XXI

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE MOTOR FREIGHT TRANSPORTATION AND WAREHOUSING INDUSTRY

(SIC 42)

OCCUPATIONAL TITLE	OES CODE	ESTIMATED EMPLOYMENT	RELATIVE ERROR %	PERCENT DISTRIBUTION	PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION
TOTAL ALL OCCUPATIONS		<u>4,398</u>			
MANAGERS & OFFICERS		<u>401</u>			
All Other Managers Officers	10000	401	9.91	9.11	70.8
PROFESSIONAL OCCUPATIONS		<u>35</u>			
Engineers	21000	3	NA	0.06	1.4
Purchasing Agents	25300	7	NA	0.15	4.2
Accountants & Auditors	25401	19	37.95	0.43	11.1
Personnel & Labor Relations	25465	3	NA	0.06	2.8
All Other Professional	29000	3	NA	0.06	1.4
TECHNICAL OCCUPATIONS		<u>3</u>			
Computer Programmer	31000	3	NA	0.06	2.8
SERVICE OCCUPATIONS		<u>67</u>			
Janitors, Porters & Cleaners	41000	27	32.34	0.61	13.9
Guards & Watchmen	42000	7	NA	0.15	1.4
Food Service Workers	43000	26	NA	0.59	1.4
Foreman, Nonworking	44014	7	NA	0.15	1.4
MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, POWER PLANT OCCUPATIONS		<u>3086</u>			
Mechanic, Automotive	51008	67	33.25	1.52	12.5
Mechanic, Maintenance	51043	5	NA	0.11	1.4
All Other Mechanics	51900	160	26.78	3.63	29.2
Truck Driver	54000	1892	13.91	43.00	79.2
Deliverymen & Postmen	55A87	432	44.73	9.82	11.1

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE MOTOR FREIGHT TRANSPORTATION AND WAREHOUSING INDUSTRY
(CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
MAINTENANCE, CONSTRUCTION REPAIR, MATERIAL HANDLING, POWER PLANT OCCUPATIONS		<u>3086</u>			
Foreman, Maintenance Industrial Truck Operators	55B29 55B57	44 22	30.26 NA	1.00 0.50	16.7 2.8
Maintenance Man, General All Other Skilled Craftsmen	55B86 59001	12 10	NA NA	0.27 0.22	2.8 2.8
All Other Operatives	59002	27	48.35	0.61	5.6
All Other Laborers	59003	415	33.56	9.43	22.2
CLERICAL OCCUPATIONS		<u>746</u>			
Bookkeeping & Billing	61103	41	44.22	0.93	9.7
Computer Operator	61105	2	NA	0.04	1.4
Keypunch Operator	61107	7	NA	0.15	2.8
Stenographer	61200	5	NA	0.11	1.4
Accounting Clerk	61301	14	NA	0.31	5.6
Bookkeeper, Hand	61307	99	23.20	2.25	31.9
Cashier	61314	12	NA	0.27	5.6
File Clerk	61330	3	NA	0.06	2.8
General Clerk	61333	73	44.96	1.65	12.5
Payroll & Timekeeper	61351	17	NA	0.38	2.8
Personnel Clerk	61352	3	NA	0.06	2.8
Receptionist	61361	10	48.33	0.22	8.3
Secretary	61368	89	24.68	2.02	27.8
Switchboard Operator/ Receptionist	61377	3	NA	0.06	2.8
Typist	61392	26	NA	0.59	9.7
Clerical Supervisor	61396	26	NA	0.59	8.3
All Other Office Clerical	61900	14	NA	0.31	4.2
Shipping Packer	62004	51	41.59	1.15	6.9
Shipping & Receiving	62005	29	37.73	0.65	11.1
Storeroom Stockclerk	62008	99	36.64	2.25	13.9
Vehicle Dispatcher	62018	90	24.02	2.04	30.6
Switchboard Operator	61376	2	NA	0.04	1.4
All Other Plant Clerical	62900	31	NA	0.70	2.8

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE MOTOR FREIGHT TRANSPORTATION AND WAREHOUSING INDUSTRY
(CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
SALES OCCUPATIONS		<u>60</u>			
Crating & Moving	71004	10	49.40	0.22	4.2
Traffic Agent	71010	26	38.77	0.59	9.7
All Other Sales Persons	71900	24	NA	0.54	5.6

TABLE XXII

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE AIR AND WATER TRANSPORTATION INDUSTRY

SIC (44-45)

OCCUPATIONAL TITLE	OES CODE	ESTIMATED EMPLOYMENT	RELATIVE ERROR %	PERCENT DISTRIBUTION	PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION
TOTAL ALL OCCUPATIONS		<u>581</u>			
MANAGERS & OFFICERS		<u>46</u>			
All Other Managers & Officers	10000	46	11.79	7.92	73.3
PROFESSIONAL OCCUPATIONS		<u>3</u>			
All Other Professional	29000	3	NA	0.52	6.7
TECHNICAL OCCUPATIONS		<u>50</u>			
All Other Technical	39000	50	43.07	8.61	60.0
SERVICE OCCUPATIONS		<u>1</u>			
Foreman, Nonworking	44014	1	NA	0.17	6.7
MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, POWER PLANT OCCUPATIONS		<u>186</u>			
Marine Mechanic	51042	3	NA	0.52	13.3
All Other Mechanics	51900	61	37.36	10.50	60.0
Truck Driver	54000	3	NA	0.52	6.7
Foreman, Maintenance	55B29	8	NA	1.38	13.3
Maintenance Man, General	55B86	44	14.69	7.57	26.7
Boatswain	55T50	2	NA	0.34	13.3
All Other Skilled Craftsmen	59001	24	37.24	4.13	13.3
All Other Operatives	59002	1	NA	0.17	6.7
All Other Laborers	59003	40	21.95	6.88	13.3
CLERICAL OCCUPATIONS		<u>33</u>			
Stockkeeper, Hand	61307	3	NA	0.52	6.7
General Clerk	61333	5	NA	0.88	6.7
Payroll and Timekeeper	61351	3	NA	0.52	6.7

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE AIR AND WATER TRANSPORTATION INDUSTRY
(CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
CLERICAL OCCUPATIONS		<u>33</u>			
Receptionist	61361	3	NA	0.52	6.7
Secretary	61368	11	NA	1.89	33.3
Clerical Supervisor	61396	1	NA	0.17	6.7
All Other Office Clerical	61900	3	NA	0.52	6.7
Storeroom Stockclerk	62008	4	NA	0.69	6.7
SALES OCCUPATIONS		<u>262</u>			
Traffic Agent	71010	262	24.14	45.09	33.3

TABLE XXIII

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE PIPELINE INDUSTRY (EXCLUDE NATURAL GAS)

(SIC 46)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
TOTAL ALL OCCUPATIONS		<u>107</u>			
MANAGERS & OFFICERS		<u>3</u>			
All Other Managers & Officers	10000	3	3.33	2.77	50.0
PROFESSIONAL OCCUPATIONS		<u>3</u>			
Electrical Engineers	21005	3	3.33	2.77	50.0
TECHNICAL OCCUPATIONS		<u>6</u>			
Drafter	32003	3	3.33	2.77	50.0
Electrical Technician	32004	3	3.33	2.77	50.0
MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, POWER PLANT OCCUPATIONS		<u>86</u>			
Foreman, Maintenance	55B29	13	3.26	12.03	50.0
Gas Compressor Operator	55B41	19	15.62	17.59	50.0
Maintenance Man, General	55B86	10	3.16	9.25	50.0
Welders & Flamecutters	55D46	3	3.33	2.77	50.0
All Other Operatives	59002	41	3.36	37.96	50.0
CLERICAL OCCUPATIONS		<u>9</u>			
Accounting Clerk	61301	6	3.72	5.55	50.0
Secretary	61368	3	3.33	2.77	50.0

TABLE XXIV

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE TRANSPORTATION SERVICES INDUSTRY

(SIC 47)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
TOTAL ALL OCCUPATIONS		<u>228</u>			
MANAGERS & OFFICERS		<u>27</u>			
All Other Managers & Officers	10000	27	21.29	11.94	60.0
PROFESSIONAL OCCUPATIONS		<u>101</u>			
Travel Agents	25531	101	22.92	44.69	50.0
SERVICE OCCUPATIONS		<u>9</u>			
Guide Travel	44017	9	NA	3.98	10.0
MAINTENANCE, CONSTRUCTION, REPAIR, MATERIAL HANDLING, POWER PLANT OCCUPATIONS		<u>6</u>			
Other Laborers	59003	6	NA	2.65	10.0
CLERICAL OCCUPATIONS		<u>73</u>			
Bookkeeper, Hand	61307	12	31.05	5.30	30.0
General Clerk	61333	55	46.24	24.33	50.0
Receptionist	61361	3	NA	1.32	10.0
Secretary	61368	3	NA	1.32	10.0
SALES OCCUPATIONS		<u>12</u>			
All Other Salespersons	71900	12	NA	5.30	10.0

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE COMMUNICATION INDUSTRY

(SIC 48)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
TOTAL ALL OCCUPATIONS		<u>4108</u>			
MANAGERS & OFFICERS		<u>330</u>			
All Other Managers & Officers	10000	330	2.90	8.03	93.8
PROFESSIONAL OCCUPATIONS		<u>272</u>			
Electrical Engineer	21005	133	3.32	3.23	56.3
Photographer	25200	4	NA	0.09	6.3
Television Cameraman	25205	9	NA	0.21	6.3
Purchasing Agent	25300	1	NA	0.02	3.2
Accountants & Auditors	25401	1	NA	0.02	3.2
Announcer	25409	70	37.54	1.70	65.6
Broadcast News Analyst	25412	5	42.42	0.12	25.0
Commercial Artist	25426	1	NA	0.02	6.3
Writer/Editor	25436	16	45.36	0.38	37.5
Film Editor	25440	1	NA	0.02	3.2
Personnel & Labor Relations	25465	15	6.28	0.36	6.3
Public Relations	25472	4	8.66	0.09	3.2
Reporters & Correspondents	25476	11	46.01	0.26	18.8
Technical Director	25483	1	NA	0.02	6.3
TECHNICAL OCCUPATIONS		<u>92</u>			
Electrical Technician	32004	39	NA	0.94	3.2
Sound Recording & Reproduction	32015	1	NA	0.02	18.8
Video Recording Engineer	32016	2	NA	0.04	3.2
Broadcast Technician	32017	18	NA	0.43	3.2
All Other Engineering Technicians	32900	31	8.51	0.75	9.4
All Other Technical	39000	1	9.99	0.02	6.3
SERVICE OCCUPATIONS		<u>85</u>			
Janitors, Porters & Cleaners	41000	85	4.60	2.06	25.0

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE COMMUNICATION INDUSTRY
(CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
MAINTENANCE OCCUPATIONS		<u>1495</u>			
Radio Mechanic	51051	4	NA	0.09	6.3
Truck Driver	54000	1	NA	0.02	3.2
Maintenance Foreman	55B29	184	4.78	4.47	12.5
Instrument Repairman	55B62	9	NA	0.21	6.3
Maintenance Man, General	55B86	90	37.70	2.19	12.5
Stationary Engineer	55C91	10	9.21	0.24	3.2
All Other Skilled Craftsmen	59001	1182	5.34	28.77	28.1
All Other Operatives	59002	2	NA	0.04	3.2
All Other Laborers	59003	13	22.20	0.31	9.4
CLERICAL OCCUPATIONS		<u>1772</u>			
Bookkeeping & Billing	61103	2	NA	0.04	3.2
Computer Operator	61105	1	NA	0.02	3.2
Stenographer	61200	67	9.44	1.63	3.2
Accounting Clerk	61301	31	4.72	0.75	6.3
Plant Bookkeeper	61307	35	46.52	0.85	59.4
Cashier	61314	25	13.74	0.60	21.9
File Clerk	61330	10	9.21	0.24	3.2
Payroll or Timekeeper	61351	4	48.08	0.09	6.3
Receptionist	61361	12	18.08	0.29	25.0
Secretary	61368	37	16.82	0.90	50.0
Switchboard Operator	61376	900	5.34	21.90	6.3
Traffic Clerk	61386	18	47.26	0.43	25.0
Typist	61392	92	7.89	2.23	12.5
General Clerk	61333	308	8.98	7.49	6.3
Clerical Supervisor	61396	102	9.36	2.48	3.2
All Other Office Clerical	61900	18	28.84	0.43	15.6
Production Clerk	62003	42	9.31	1.02	3.2
Shipping & Receiving Clerk	62005	4	NA	0.09	3.2
Storeroom & Warehouse Stock Clerk	62008	16	6.81	0.38	6.3
All Other Plant Clerical	62900	48	4.89	1.16	6.3

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE COMMUNICATION INDUSTRY
(CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
SALES OCCUPATIONS		<u>62</u>			
Sales Persons	71000	62	25.38	1.50	62.5

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE ELECTRIC, GAS AND SANITARY SERVICES

(SIC 49)

OCCUPATIONAL TITLE	OES CODE	ESTIMATED EMPLOYMENT	RELATIVE ERROR %	PERCENT DISTRIBUTION	PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION
TOTAL ALL OCCUPATIONS		<u>3262</u>			
MANAGERS & OFFICERS		<u>282</u>			
All Other Managers & Officers	10000	282	5.58	8.64	89.7
PROFESSIONAL OCCUPATIONS		<u>320</u>			
Civil Engineer	21004	9	18.62	0.27	10.3
Electrical Engineer	21005	90	3.20	2.75	24.1
Mechanical Engineer	21008	30	10.54	0.91	10.3
All Other Engineers	21900	35	40.57	1.07	10.3
Natural & Mathematical Scientists	22000	2	0.00	0.06	3.4
Systems Analyst EDP	24000	9	12.66	0.27	6.9
Purchasing Agent	25300	3	39.29	0.09	6.9
Accountants & Auditors	25401	68	6.22	2.08	24.1
Lawyer	25446	8	0.00	0.24	3.4
Personnel & Labor Relations	25465	6	38.51	0.18	10.3
Right of Way Agent	25477	13	6.57	0.39	6.9
Home Economist	25532	7	29.93	0.21	13.8
All Other Professionals	29000	40	14.28	1.22	10.3
TECHNICAL OCCUPATIONS		<u>168</u>			
Computer Programmer	31000	16	7.12	0.49	6.9
Draftsman	32003	44	5.28	1.34	13.8
Electrical Technician	32004	65	8.87	1.99	10.3
Surveyor	32008	12	13.17	0.36	10.3
All Other Engineering Technicians	32900	29	17.33	0.88	24.1
All Other Technical	39000	2	NA	0.06	3.4
SERVICE OCCUPATIONS		<u>47</u>			
Janitors, Porters & Cleaners	41000	47	9.77	1.44	34.5

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE ELECTRIC, GAS AND SANITARY SERVICES
(CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
MAINTENANCE, CONSTRUCTION REPAIR, MATERIAL HANDLING, POWER PLANT OCCUPATIONS		<u>1448</u>			
Switchboard Operator Generating Plant	55D03	53	0.00	1.62	3.4
Troubleman	55D31	15	NA	0.45	3.4
Turbine Operator	55D33	3	0.00	0.09	3.4
Welders & Flamecutters	55D46	28	18.36	0.85	13.8
Load Dispatcher	55D95	37	14.92	1.13	10.3
All Other Skilled Craftsmen	59001	48	38.93	1.47	6.9
All Other Operatives	59002	35	27.79	1.07	17.2
All Other Laborers	59003	108	13.90	3.31	10.3
CLERICAL OCCUPATIONS		<u>974</u>			
Bookkeeping & Billing	61103	61	4.79	1.87	20.7
Computer Operator	61105	6	19.00	0.18	6.9
Keypunch Operator	61107	20	5.70	0.16	6.9
All Other Office Machines	61199	15	7.80	0.45	6.9
Stenographer	61200	29	11.52	0.88	10.3
Accounting Clerk	61301	100	11.63	3.06	20.7
Bookkeeper, Hand	61307	52	5.73	1.59	37.9
Cashier	61314	53	10.57	1.62	37.9
Collector	61319	6	35.19	0.18	13.8
File Clerk	61330	6	25.81	0.18	13.8
General Clerk	61333	101	12.04	3.09	41.4
Order Clerk	61350	37	2.84	1.13	6.9
Payroll & Timekeeper	61351	12	20.49	0.36	17.2
Personnel Clerk	61352	9	42.42	0.27	10.3
Receptionist	61361	13	16.69	0.39	20.7
Secretary	61368	59	8.05	1.80	41.4
Switchboard Operator	61376	17	6.19	0.52	6.9
Switchboard Operator/ Receiver	61377	3	40.13	0.09	6.9
Typist	61392	9	26.22	0.27	13.8
Clerical Supervisor	61396	38	8.35	1.16	17.2
All Other Office Clerical	61900	59	8.04	1.80	10.3

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE ELECTRIC, GAS AND SANITARY SERVICES
(CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
MAINTENANCE, CONSTRUCTION REPAIR, MATERIAL HANDLING, POWER PLANT OCCUPATIONS		<u>1448</u>			
Mechanic, Automotive	51008	14	15.66	0.42	20.7
Hydroelectric Machine Mechanic	51036	36	6.34	1.10	10.3
Mechanic, Maintenance	51043	68	1.73	2.08	6.9
Treatment Plant Mechanic	51058	3	0.00	0.09	3.4
Household Appliance Mechanic	51059	72	14.15	2.20	6.9
All Other Mechanics	51900	47	NA	1.44	10.3
Truck Driver	54000	37	12.61	1.13	24.1
Carpenter	55A47	1	0.00	0.03	3.4
Control Room Operator	55A75	16	9.72	0.49	6.9
Corrosion Control	55A80	6	20.06	0.18	10.3
Electric Meter Installer	55B09	11	39.42	0.33	6.9
Electrician	55B12	47	14.06	1.44	17.2
Auxiliary Equipment Operator	55B15	46	18.46	1.41	6.9
Maintenance Foreman	55B29	92	8.04	2.82	37.9
Gas Compressor Operator	55B41	101	13.45	3.09	6.9
Gas Dispatcher	55B42	15	28.31	0.45	6.9
Groundman	55B49	41	17.22	1.25	24.1
Heavy Equipment Operator	55B52	65	49.38	1.99	24.1
Instrument Repairman	55B62	12	28.00	0.36	10.3
Lineman	55B73	187	21.72	5.73	51.7
Machinist	55B84	8	0.00	0.24	3.4
General Maintenance Man	55B86	50	NA	1.53	24.1
Trade Helper	55B87	15	14.68	0.45	13.8
Pipe Layer	55C23	29	49.39	0.88	6.9
Plumber/Pipefitter	55C30	23	24.78	0.70	6.9
Refuse Collector	55C51	55	NA	1.68	17.2
Stationary Boiler Operator	55C90	16	33.89	0.49	10.3
Stationary Engineer	55C91	25	40.78	0.76	6.9
Street Light Repairman	55C94	17	0.00	0.52	3.4
Substation Operator	55D01	9	0.00	0.27	3.4

ESTIMATED EMPLOYMENT IN SELECTED OCCUPATIONS
IN THE ELECTRIC, GAS AND SANITARY SERVICES
(CONT.)

<u>OCCUPATIONAL TITLE</u>	<u>OES CODE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>RELATIVE ERROR %</u>	<u>PERCENT DISTRIBUTION</u>	<u>PERCENT OF ESTABLISHMENTS REPORTING THE OCCUPATION</u>
CLERICAL OCCUPATIONS		<u>974</u>			
Meter Reader	62002	133	9.66	4.07	34.5
Shipping & Receiving	62005	15	10.32	0.45	13.8
Storeroom & Warehouse Stock Clerk	62008	27	12.10	0.82	27.6
Vehicle Dispatcher	62018	29	14.83	0.88	10.3
All Other Plant Clerical	62900	22	40.48	0.67	10.3
SALES OCCUPATIONS		<u>23</u>			
Sales Persons	71000	23	10.72	0.70	17.2

MONTANA
ESTIMATED EMPLOYMENT
IN MAJOR SPECIFIC OCCUPATIONS
FOR EACH SURVEY INDUSTRY
SIC (41, 42, 44-49)

TABLE XXVII

ESTIMATED EMPLOYMENT IN MAJOR SPECIFIC OCCUPATIONS

LOCAL & SUBURBAN TRANSIT

(SIC 41)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Bus Drivers	560 ^{1/}	51.5
Taxi Drivers	160	14.3
Ambulance Drivers	80	7.3
Managers & Officers	80	7.0
Vehicle Dispatchers	50	4.9
Ticket Agents	40	3.3
Automotive Mechanics	<u>40</u>	<u>3.1</u>
TOTAL:	1,010	91.4
TOTAL ALL OCCUPATIONS:	<u>1,090</u>	<u>100.0</u>

^{1/} Occupational data are rounded and may not add to total.

TABLE XXVIII

ESTIMATED EMPLOYMENT IN MAJOR SPECIFIC OCCUPATIONS
 MOTOR FREIGHT TRANSPORTATION AND WAREHOUSING
 (SIC 42)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Truck Driver	1,890 ^{1/}	43.1
Deliverymen & Routemen	430	9.8
All Other Laborers	420	9.5
Managers & Officers	400	9.1
All Other Mechanics	160	3.6
Hand Bookkeeper	100	2.3
Storeroom Stock Clerk	100	2.3
Vehicle Dispatcher	90	2.0
Secretary	90	2.0
General Clerks	70	1.6
Automotive Mechanics	70	1.6
Shipping Packer	<u>50</u>	<u>1.1</u>
TOTAL:	3,870	88.0
TOTAL ALL OCCUPATIONS:	<u>4,400</u>	<u>100.0</u>

^{1/} Occupational data are rounded and may not add to total.

TABLE XXIX

ESTIMATED EMPLOYMENT IN MAJOR SPECIFIC OCCUPATIONS

AIR & WATER TRANSPORTATION

(SIC 44-45)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Traffic Agent	260 ^{1/}	45.6
All Other Mechanics	60	10.5
All Other Technical	50	8.8
Maintenance Man, General	40	8.2
Managers & Officers	40	8.2
All Other Laborers	<u>40</u>	<u>8.2</u>
TOTAL:	490	88.0
TOTAL ALL OCCUPATIONS:	<u>570</u>	<u>100.0</u>

^{1/} Occupational data are rounded and may not add to total.

TABLE XXX

ESTIMATED EMPLOYMENT IN MAJOR SPECIFIC OCCUPATIONS
 PIPELINES (Excluding Natural Gas) & TRANSPORTATION SERVICES
 (SIC 46-47)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Travel Agents	100 ^{1/}	29.4
General Clerks	60	17.6
All Other Operatives	40	11.8
Managers & Officers	30	8.8
Gas Compressor Operators	<u>20</u>	<u>5.9</u>
TOTAL:	250	73.5
TOTAL ALL OCCUPATIONS:	<u>340</u>	<u>100.0</u>

^{1/} Occupational data are rounded and may not add to total.

TABLE XXXI

ESTIMATED EMPLOYMENT IN MAJOR SPECIFIC OCCUPATIONS

COMMUNICATIONS

(SIC 48)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
All Other Skilled Craftsmen	1,180 ^{1/}	28.7
Switchboard Operator	900	21.9
Managers & Officers	330	8.0
General Clerks	310	7.5
Foreman Maintenance	180	4.4
Electrical Engineers	130	3.2
Clerical Supervisors	100	2.4
Typists	90	2.4
Maintenance Man, General	90	2.4
Janitors & Porters	90	2.4
Announcers	70	1.7
Stenographers	<u>70</u>	<u>1.7</u>
TOTAL:	3,540	86.7
TOTAL ALL OCCUPATIONS:	<u>4,110</u>	<u>100.0</u>

^{1/} Occupational data are rounded and may not add to total.

TABLE XXXII

ESTIMATED EMPLOYMENT IN MAJOR SPECIFIC OCCUPATIONS
 ELECTRIC, GAS, AND SANITARY SERVICES
 (SIC 49)

<u>OCCUPATIONAL TITLE</u>	<u>ESTIMATED EMPLOYMENT</u>	<u>PERCENT OF TOTAL</u>
Managers & Officers	280 ^{1/}	8.6
Linemen	190	5.8
Utility Meter Readers	130	4.0
All Other Laborers	110	3.4
Gas Compressor Operator	100	3.1
General Clerk	100	3.1
Accounting Clerk	100	3.1
Maintenance Foreman	90	2.8
Electrical Engineer	90	2.8
Household Appliance Mechanic	<u>70</u>	<u>2.1</u>
TOTAL:	1,260	38.8
TOTAL ALL OCCUPATIONS:	<u><u>3,260</u></u>	<u><u>100.0</u></u>

^{1/} Occupational data are rounded and may not add to total.

A P P E N D I X

DEFINITIONS OF SELECTED OCCUPATIONS
IN THE TRANSPORTATION, COMMUNICATION AND UTILITIES INDUSTRIES

ACCOUNTANTS & AUDITORS: Examines and analyzes and interprets accounting records for the purpose of giving advice or preparing statements and installing or advising on systems of recording costs or other financial and budgetary data.

ACCOUNTING CLERK: Performs a variety of routine calculating and posting duties to accomplish accounting. May perform typing.

ALL OTHER LABORERS: Include all other laborers and unskilled workers in operating, maintenance, construction, repair, material handling, and powerplant occupations that involve the performance of simple duties requiring little or no independent judgment. Such occupations do not require previous specific experience and may vary from a minimum of physical exertion to heavy physical work. Occupations should be counted as unskilled if the specific vocational preparation required to perform them consists of anything from a short demonstration only up to and including 30 days training or other preparation.

ALL OTHER MECHANICS AND REPAIRERS: Include other skilled repairers and maintenance mechanics not classified elsewhere.

ALL OTHER SKILLED CRAFTSMEN: Include all other skilled craftsmen in operating, maintenance, construction, repair, material handling, and powerplant occupations that require a comprehensive knowledge of processes involved in the work, the exercise of independent judgment, usually a high degree of manual dexterity, and some responsibility for products or equipment. Workers usually qualify by apprenticeship or extensive training. Occupations should be counted as skilled if the specific vocational preparation required to perform them involves training or other preparation of more than two years.

ALL OTHER TECHNICIANS: (Tool Programmer, Numerical Control; etc.) Include all other technicians not classified elsewhere.

AMBULANCE DRIVER: Drives ambulance to transport sick, injured or convalescent persons.

ANNOUNCER (Disc Jockey; Sports Announcer; Station Announcer; etc.): Introduces various types of radio or television programs, interviews, questions, and acts as Master of Ceremonies. Reads news flashes, identifies station by giving call letters.

BOOKKEEPER, HAND (General-Ledger Bookkeeper; Balance Clerk; Etc.): Keeps record of financial transactions of establishment or keeps one section or set of financial records.

BOOKKEEPING & BILLING: Operates special billing machines, generally a combination typing and adding machine, to prepare statements, bills, and invoices, or operates bookkeeping machines to copy and post data, make computations, and/or compile records of transactions.

BUS DRIVER: Drives bus over specified routes according to time schedules. Assists passengers with baggage and collects tickets or cash fares.

DEFINITIONS OF SELECTED OCCUPATIONS
IN THE TRANSPORTATION, COMMUNICATION AND UTILITIES INDUSTRIES
(CONT.)

CASHIER (Disbursement Clerk; Payments-Received Cashier; etc.; INCLUDE Cashier-Checkers): Receives and disburses money in establishments other than banks. Usually involves use of adding machines, cash registers, and change makers.

CLERICAL SUPERVISOR, OFFICE OR PLANT (Typing Supervisor; Stock Clerk Supervisor; etc. EXCLUDE Office Manager): Supervises and coordinates activities of workers engaged chiefly in one type of clerical function such as typing, filing, bookkeeping, tabulating data, etc. May assume responsibility for completion and accuracy of work being supervised. This classification does not include working supervisors (those spending 20 percent or more of their time at tasks similar to those of employees under their supervision.)

DELIVERY & ROUTE WORKER (INCLUDE Driver and Route Sales Agent): Drives vehicle to deliver, sell, pick up and display merchandise and products. Operates within a specified locality or over an established local route. May solicit new business. May collect money for items delivered.

DISPATCHER, VEHICLE, SERVICE OR WORK: Dispatches buses, taxis, trucks and other motor vehicles for conveyance of freight or passengers. Dispatches workmen or servicemen for normal installation service or emergency repairs. May use radio or telephone.

ELECTRICAL & ELECTRONIC ENGINEERS: Electrical Engineer: Designs, plans, and oversees manufacture, construction, installation, operation, and maintenance of electric or electronic components, equipment, systems, facilities, and machinery used in generation, transmission, distribution, and utilization of electrical energy. Electronic Engineer: Conducts research and development concerned with design and manufacture of various electronic equipment and their application.

ELECTRICAL AND ELECTRONIC TECHNICIANS: Technicians with a background in electrical or electronic theory, physical science, and mathematics, capable of more than routine work. Normally, such employees construct, repair, test, install, modify, operate, or even design a variety of complex electrical or electronic equipment.

GAS COMPRESSOR OPERATOR: Operates steam or internal combustion engines to transmit, compress, or recover gases, such as butane, nitrogen, hydrogen, and natural gas, in various production processes.

GENERAL CLERK, OFFICE: Workers without any specific office clerical occupation. Clerical duties may include a combination of bookkeeping, typing, stenography, office machine operation, etc.

GROUNDMAN: Performs a variety of tasks on ground to aid in erection of utility poles and installation and repair of overhead powerlines and communication lines.

HEAVY EQUIPMENT OPERATOR: Operates several types of power construction equipment, such as compressors, pumps, shovels, tractors, scrapers, or motor graders, to excavate, grade earth, pour concrete, etc.

HOUSEHOLD APPLIANCE INSTALLER: Installs household appliances, such as refrigerators, washing machines, stoves, and television receiving sets, in customers' homes, using handtools.

DEFINITIONS OF SELECTED OCCUPATIONS
IN THE TRANSPORTATION, COMMUNICATION AND UTILITIES INDUSTRIES
(CONT.)

HYDROELECTRIC-MACHINERY MECHANIC: POWERHOUSE REPAIRMAN, AND/OR GAS PLANT REPAIRMAN: Repairs and maintains mechanical elements of generators, water-wheels, water-inlet and floodgate controls, valves and piping in a hydroelectric generating station. Maintains and repairs steam boilers, condensers, pumps, compressors, purifiers and other mechanical equipment in gas manufacturing plant. Installs, adjusts, and repairs mechanical equipment and mechanical parts of electrical machinery in electric-generating station.

JANITORS, PORTERS, CLEANERS: Keep building in clean and orderly condition; may have additional duties and responsibilities such as tending furnace and boiler, performing routine maintenance activities, notifying management of need for repairs and additions, and cleaning snow or debris from sidewalks.

LINEMAN: Strings and repairs cables or wires, installs insulators and erects poles or towers for telephone or electrical power transmission. May work in tunnels.

MAINTENANCE REPAIRER, GENERAL UTILITY: Uses two or more maintenance skills to keep machines, equipment and/or structure of an establishment in repair. Duties may involve pipefitting, boilermaking, insulating, welding, machining, repair work, carpentry and electrical work as well as planning and laying out of work relating to repairs; installing new equipment.

MANAGERS AND OFFICERS (INCLUDE Corporate Officers; Construction Superintendent; Project Superintendent; Construction Inspector; Office Manager; Sales Manager; etc.; EXCLUDE Owners and Partners of Unincorporated Firms, and Foreman, Nonworking): Include persons concerned with policy making, planning, organizing, staffing, directing, and/or controlling activities common to many organizations, usually through subordinate supervisors. Include persons who may engage in the same activities as the workers they supervise, but who also may organize, control and finance the operation of an enterprise. (Include ONLY Managers and Officers who are exempt from the minimum wage and overtime provisions of the Fair Labor Standards Act.)

MECHANIC, AUTOMOTIVE (Truck Mechanic; Auto Mechanic; Industrial Truck Mechanic; etc.): Repairs and overhauls automobiles, buses, trucks and other automotive vehicles.

METER READER, UTILITIES: Reads electric, gas, water, or steam consumption meters and records volume used by residential and commercial customers.

REFUSE COLLECTOR (Garbage Collector; etc.): Collects refuse on designated route within municipality and dumps refuse from containers onto truck.

SALES REPRESENTATIVE, SALES AGENT, AND/OR ASSOCIATE: Include persons concerned with selling when knowledge of the goods or services sold is required. EXCLUDE Cashier, Sales Route Driver and Sales Engineer.

SECRETARY: Schedules appointments; gives information to caller; takes and transcribes dictation; and otherwise relieves officials of clerical work and minor administrative and business detail.

DEFINITIONS OF SELECTED OCCUPATIONS
IN THE TRANSPORTATION, COMMUNICATION AND UTILITIES INDUSTRIES
(CONT.)

SHIPPING PACKER (Freight Clerk; Reshipping Clerk; etc.): Assembles, packs, addresses, stamps, loads, and ships merchandise or material.

STENOGRAPHER (Court Reporter; Hearings Reporter; etc.): Takes dictation of correspondence, reports, and other matters, and transcribes dictated material. Performs variety of clerical duties, except when working in stenographic pool. May transcribe material from sound recordings.

STOCK CLERK, STOCK ROOM, WAREHOUSE OR STORAGE YARD (Storekeeper; Material Clerk; Parts Clerk; Stock-Control Clerk; Inventory Clerk; Merchandise Distributor; Tool Clerk; etc.): Receives, stores, and issues equipment, material, merchandise, supplies, tools, or dies and compiles stock records in stockroom, warehouse, or storage yard. Check incoming orders; store supplies; identify articles; take inventory; make reports; request or order supplies. EXCLUDE stock room laborers and non-working supervisors of stock clerks and laborers.

SUPERVISOR, NONWORKING (Shop Supervisor; Maintenance Supervisor; etc.; EXCLUDE Leadmen, Service Supervisor): Supervises and coordinates activities of workers engaged in maintenance, construction, repair, material handling, and powerplant occupations. Studies work schedules and estimates employee-hour requirements for completion of job assignment. This classification does NOT include working supervisors (those spending 20% or more of their time at tasks similar to those of employees under their supervision).

SWITCHBOARD OPERATOR: Operates cord or cordless switchboard to relay incoming, outgoing, and interoffice calls. May supply information to callers, and record messages.

TAXI DRIVER (Chauffeur, Airport Limousine; etc.) Operates taxicab to transport passengers for a fee. May drive limousine to pick up and discharge airport passengers arriving or leaving on scheduled flights.

TRAFFIC AGENT: Contacts firms to solicit freight business and contacts travel agencies, schools, clubs, and other organizations to solicit passenger patronage.

TRAVEL AGENT AND/OR TRAVEL-ACCOMMODATIONS APPRAISER (Touring Reporter; Travel-Guide Representative; etc.): Arranges transportation, accommodations, and/or tours for clients. Inspects, rates, and classifies hotels, motels, restaurants, and resorts for cleanliness, quality of service, type of accommodations provided, rates charged, and related factors. May sell advertising space in publications.

TRUCK DRIVER (Tow Truck Driver; etc.): Drives truck or tractor trailer to transport materials to and from specified destinations such as railroad stations, plants, construction sites, or within industrial yards.

TYPIST (INCLUDE Clerk-Typist): Types letters, reports, stencils, forms, addresses or other straight-copy material from rough draft or corrected copy. May perform other clerical duties as assigned.

TABLE XXXIII

NATIONAL
AVERAGE WEEKLY EARNINGS

<u>YEAR</u>	<u>TOTAL</u>	<u>SIC 41</u>	<u>SIC 42</u>	<u>SIC* 44-45</u>	<u>SIC 46</u>	<u>SIC* 47</u>	<u>SIC 48</u>	<u>SIC 49</u>
1965	\$125.44	\$120.96	\$130.48	NA	\$145.85	NA	\$111.38	\$131.24
1966	128.13	128.67	133.98	NA	151.29	NA	115.54	136.95
1967	131.22	132.06	134.37	NA	160.16	NA	116.33	142.42
1968	138.85	137.43	142.96	NA	167.26	NA	123.16	150.28
1969	148.15	147.17	151.73	NA	175.94	NA	131.93	161.41
1970	155.93	155.59	159.39	NA	189.20	NA	134.01	172.64
1971	169.24	162.15	180.98	NA	201.62	NA	140.59	185.47
1972	187.92	171.86	201.96	NA	212.79	NA	166.99	200.45
1973	204.62	186.30	221.34	NA	227.15	NA	183.35	214.34
1974	218.29	197.24	232.22	NA	245.01	NA	198.79	226.74
June, 1975	231.45	215.01	239.59	NA	280.67	NA	212.46	245.74

Source: U.S. Department of Labor Bureau of Labor Statistics.

* Wage information for SIC Codes 44,45 and 47 is not available.

TABLE XXXIV

NATIONAL
AVERAGE HOURLY EARNINGS

<u>YEAR</u>	<u>TOTAL</u>	<u>SIC 41</u>	<u>SIC 42</u>	<u>SIC* 44-45</u>	<u>SIC 46</u>	<u>SIC* 47</u>	<u>SIC 48</u>	<u>SIC 49</u>
1965	\$3.03	\$2.82	\$3.07	N/A	\$3.54	N/A	\$2.75	\$3.17
1966	3.11	2.95	3.16	N/A	3.69	N/A	2.86	3.30
1967	3.24	3.11	3.23	N/A	3.85	N/A	2.96	3.44
1968	3.42	3.29	3.42	N/A	4.04	N/A	3.11	3.63
1969	3.64	3.52	3.63	N/A	4.26	N/A	3.29	3.88
1970	3.85	3.71	3.85	N/A	4.57	N/A	3.41	4.16
1971	4.21	3.93	4.34	N/A	4.87	N/A	3.69	4.48
1972	4.64	4.22	4.82	N/A	5.19	N/A	4.26	4.83
1973	5.04	4.58	5.27	N/A	5.50	N/A	4.63	5.14
1974	5.43	5.01	5.65	N/A	6.02	N/A	5.02	5.49
ne, 1975	5.83	5.47	5.96	N/A	6.93	N/A	5.49	5.95

Source: U.S. Department of Labor Bureau of Labor Statistics.

* Wage information for SIC Codes 44,45 and 47 is not available.

TABLE XXXV

NATIONAL
AVERAGE WEEKLY HOURS

<u>YEAR</u>	<u>TOTAL</u>	<u>SIC 41</u>	<u>SIC 42</u>	<u>SIC* 44-45</u>	<u>SIC 46</u>	<u>SIC* 47</u>	<u>SIC 48</u>	<u>SIC 49</u>
1965	41.3	42.9	42.5	NA	41.2	NA	40.5	41.4
1966	41.2	43.5	42.4	NA	41.0	NA	40.4	41.5
1967	40.5	42.5	41.6	NA	41.6	NA	39.3	41.4
1968	40.6	41.9	41.8	NA	41.4	NA	39.6	41.4
1969	40.7	41.9	41.8	NA	41.3	NA	40.1	41.6
1970	40.5	42.0	41.4	NA	41.4	NA	39.3	41.5
1971	40.2	41.4	41.7	NA	41.4	NA	38.1	41.4
1972	40.5	40.8	41.9	NA	41.0	NA	39.2	41.5
1973	40.6	40.8	42.0	NA	41.3	NA	39.6	41.7
1974	40.2	39.6	41.1	NA	40.7	NA	39.6	41.3
June, 1975	39.7	39.5	40.2	NA	40.5	NA	38.7	41.3

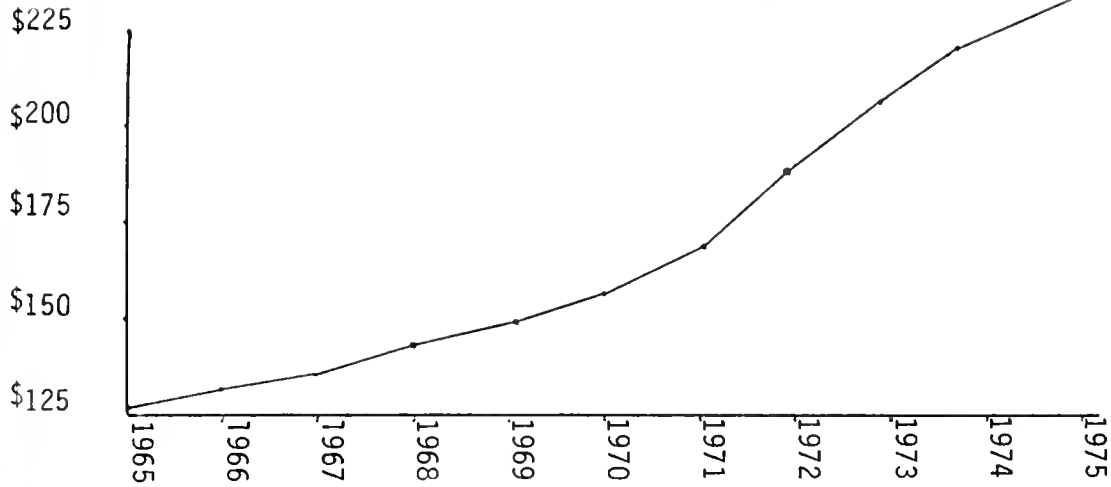
Source: U.S. Department of Labor Bureau of Labor Statistics.

* Wage information for SIC Codes 44,45 and 47 is not available.

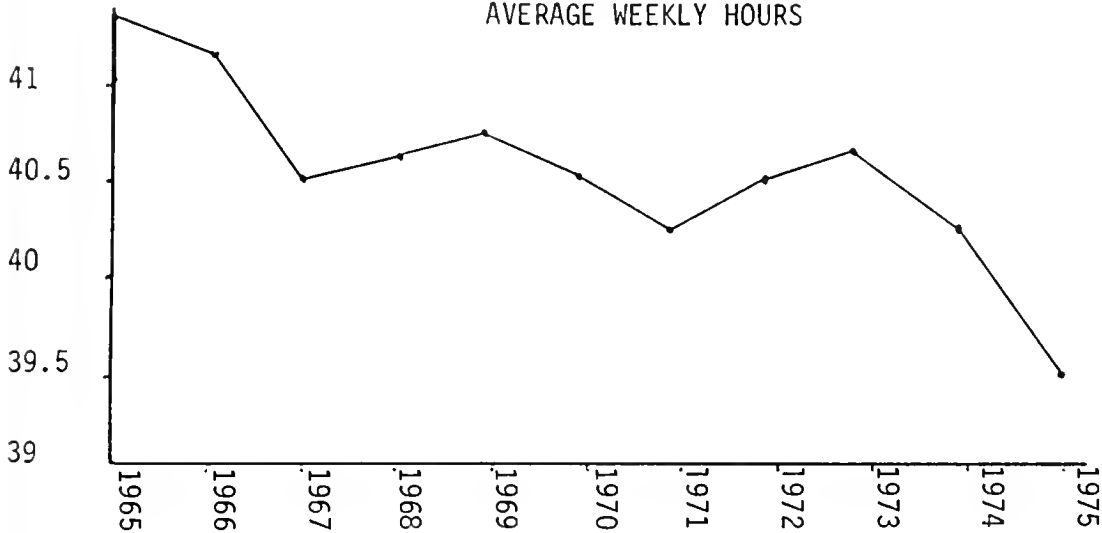
GRAPH II

NATIONAL HOURS AND EARNINGS

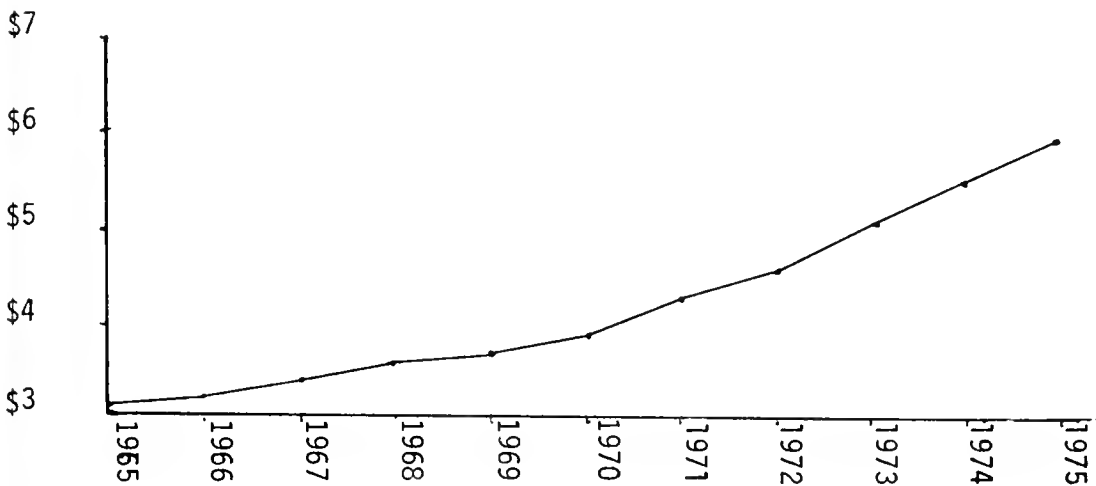
AVERAGE WEEKLY EARNINGS



AVERAGE WEEKLY HOURS

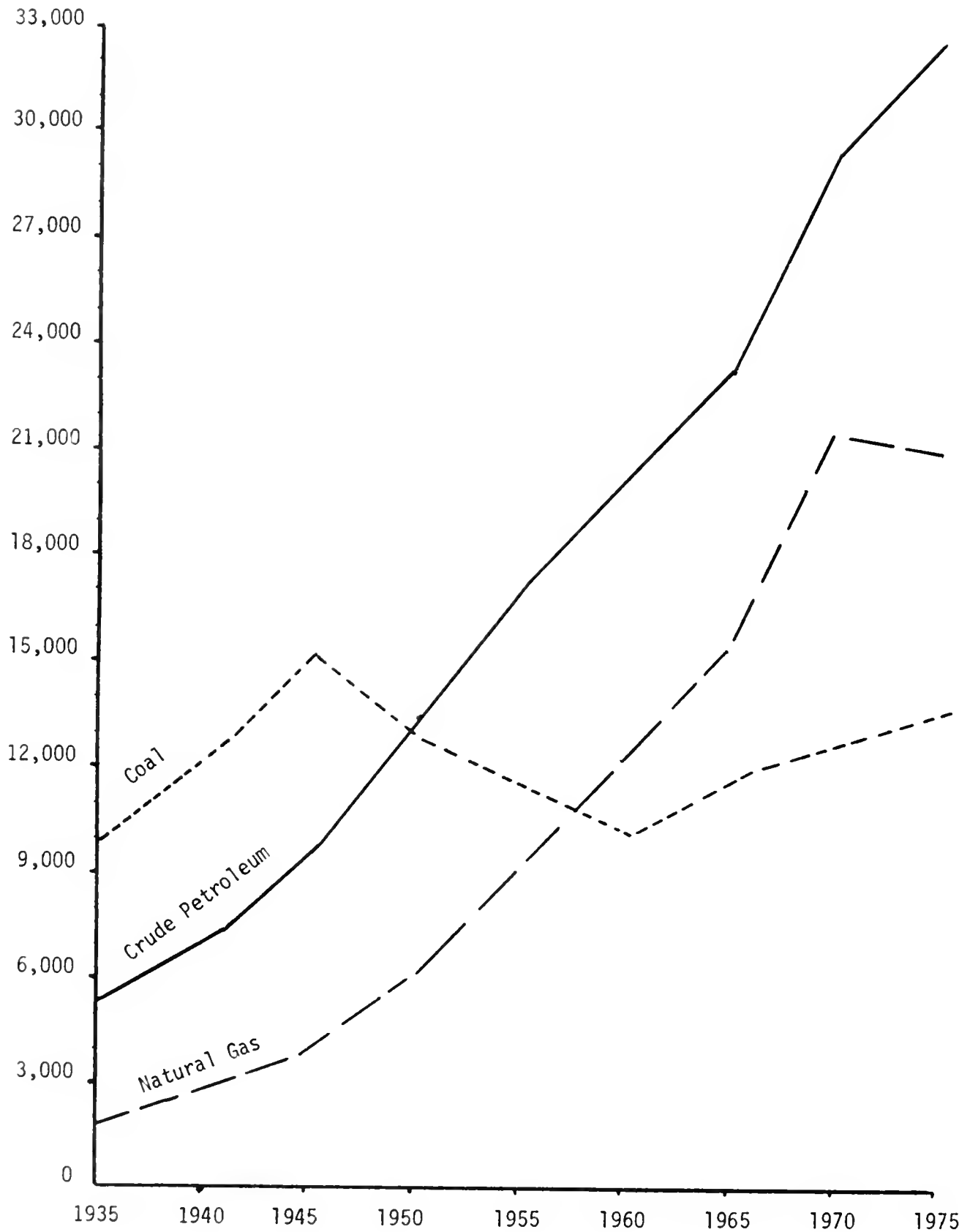


AVERAGE HOURLY EARNINGS



ENERGY CONSUMPTION IN THE UNITED STATES
1935-1975

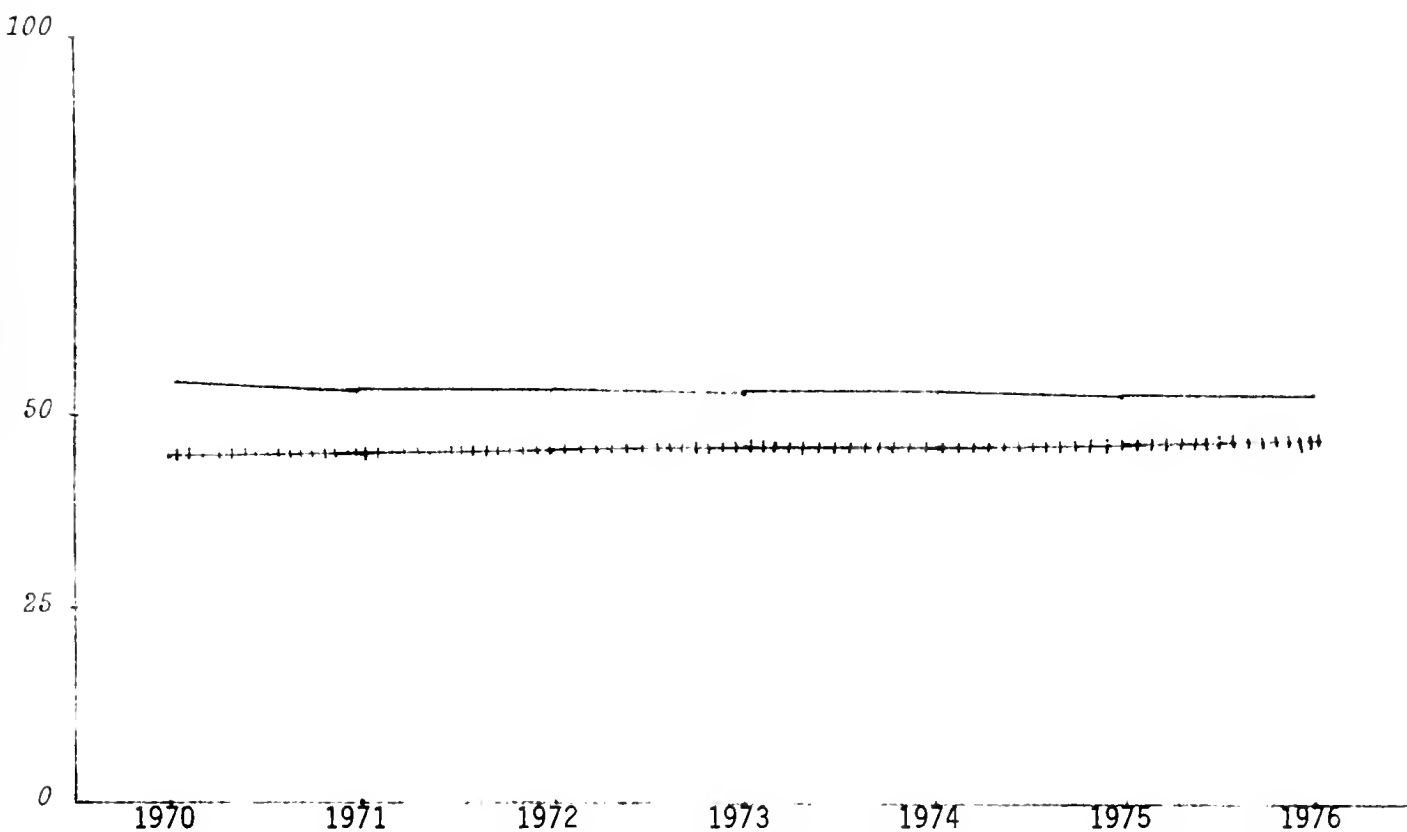
(in trillions of BTU)



Source: Statistical Abstract of the United States
P. 549

GRAPH IV

ALLOCATION OF MONTANA'S TWO MAJOR RESIDENTIAL ENERGY USES
NATURAL GAS AND ELECTRIC SERVICE



— Electric Service

+ + + + + Natural Gas Service

METHODOLOGY

A. OES SAMPLE DESIGN.

The sample used in the OES survey represented a number of firms selected from a universe consisting of all Transportation, Communications, and Utilities Industry establishments covered under Montana's Unemployment Insurance Law. The sample selected from the universe was stratified into eight groups: Local and Suburban Transit; Motor Freight Transportation and Warehousing; Water Transportation; Transportation by Air; Pipelines Except Natural Gas; Transportation Services; Communication; Electric, Gas, and Sanitary Services.

Each stratum was then classified into nine cells based on employment levels by firm. The sampling ratio was selected with respect to the employment totals in each size cell. For large size cells, which had fewer establishments, the proportionate sample ratio was smaller; for small size cells, which had more establishments, the proportionate sampling ratio was larger. Altogether over sixty-two percent of the total employment in the Transportation, Communication, and Utilities Industry was covered.

B. SURVEY CORRESPONDENCE.

1. Interviews were conducted via mail, telephone, and personal visits by Local Office personnel. Each establishment selected in the sample received a detailed survey form. Each survey form listed questions concerning employment levels, job titles, and job descriptions. The various job descriptions were prepared by the Bureau of Labor Statistics and were tested by occupational analysis field centers of the Employment and Training Administration, assuring accurate classifications of job description. Also, to assure occupational homogeneity, the surveyed firms were separated into the eight major groups within the Transportation, Communication, and Utilities division.

Further, to assure consistency in the data, establishments in the survey were asked to use the month of October, 1976 as the survey month.

2. The OES Transportation, Communication, and Utilities survey contained seven occupational categories:

- 1) Managers and Officers
- 2) Professional Occupations
- 3) Technical Occupations
- 4) Service Occupations
- 5) Maintenance, Construction, Repair, Material Handling and Powerplant Occupations.
- 6) Clerical Occupations
- 7) Sales Occupations

3. Occupational Classification.

The occupational classification system used in this OES program assumes a compromise classification between the 417 job titles from the Bureau of the Census and over 21, 741 job titles from the Dictionary of Occupational Titles (DOT). By using both sources, this more flexible OES structure has the capability of taking advantage of some of the broad socio-economic characteristics of the Bureau of the Census and at the same time preserving the ability to provide DOT job definitions for Manpower Training and Analysis. Various occupations have been classified in the "all other" residual categories, because 1) only minimal on-the-job training was required, or 2) these occupations did not have significant amounts of education and/or training.

4. Survey Processing and Screening.

After data were collected, corrections were made, data were thoroughly screened, and final editing procedures were used to produce a "clean data file".

The resulting clean data file is used to produce the occupational employment estimate for the eight industry groups in the universe industry. The estimating process uses ratio estimates and a series of weighting factors dependent upon the size cell of an establishment. For example, if the sampling ratio, or probability, of sample selection is one out of every five establishments, then the sample weight is five. This result is thus called the weighted reported occupational employment. The ratio for each size class is computed from summed weighted reported data and then this ratio is multiplied by the occupational employment as of the reference date. Accurate and reliable computed ratios are extremely important for obtaining precise estimates for employment patterns. After the employment estimates are calculated for each of the size cells, the results are summed to produce occupational estimates for each industry.

5. Reliability and Accuracy of Occupational Employment Estimates.

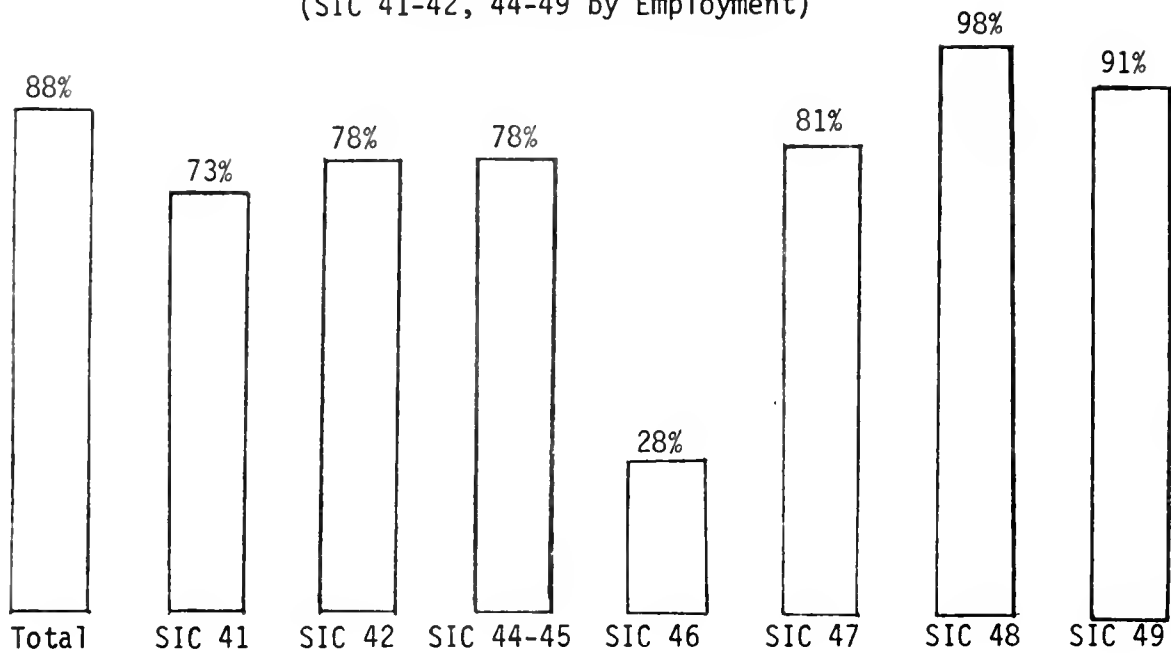
Precision of statistical data is an essential criteria for manpower education and training to successfully analyze these estimates. To optimize precision, the following types of errors must be minimized:

- a) Non-sampling errors - these are errors that arise from faulty responses to survey questionnaires, physical errors in processing surveys, inaccurately furnished data, and inadequate planning and data collecting. Great care in obtaining a "clean data file" has minimized non-sampling errors in the industry survey.
- b) Sampling errors - these are errors that result from the difference between the sample data estimate and the entire population parameter, i.e. the industry universe. This type of error is strictly due to sampling techniques.
- c) Standard errors - these errors are the square root of the variances of the estimates, where the variance of an estimate is equal to the product of squared and weighted sample observations and a series of correction factors needed when sampling from a finite population.
- d) Relative error - these errors are an important tool in measuring precision of an occupational employment estimate.

Relative error expresses the standard error of an estimate as a percentage of that estimate, i.e. relative error times occupational employment estimate is equal to the standard error. More precisely, if there are 100 managers and officers in the Communications industry and relative error is 10 percent, then the standard error is simply 10. For example, assume we estimate a total of 300 managers and officers in all the size classes in the industry universe, and the standard error is computed as 40. This error measures the precision about the estimate of 300 managers and officers. Applying the formula, the relative error, then,

expressed as a percent, is: $\frac{40 \times 100}{300} = 13.33\%$, at one standard deviation. That is, at one standard deviation from the true industry universe population of managers and officers, our estimate of 300 gives us a relative error of 13.33% at a level of confidence of 68%. Therefore, we can say that 68% of the time our estimate will be 300+ (.1667 x 300), or between 260 and 340 managers and officers. Because of the fluctuation of the relative error from one occupational characteristic to another, an optimum sample design is virtually nonattainable.

NOTE: Only those specific occupations with a relative error 50% or less were put in the publication. All occupations with relative error greater than 50% were put in the residual "all other" categories. As such the relative error was not computed for the residual categories.

MONTANA OCCUPATIONAL EMPLOYMENT SURVEY
TRANSPORTATION, COMMUNICATION, & UTILITIESPercent Survey Response
(SIC 41-42, 44-49 by Employment)

TRANSPORTATION, COMMUNICATION & UTILITIES

Sampled Employment

As A Percent Of The Universe

